

FINAL COMBINED
FISHERY MANAGEMENT PLAN AMENDMENT #2
AND ENVIRONMENTAL ASSESSMENT
FOR THE
SPINY LOBSTER FISHERIES
OF THE
WESTERN PACIFIC REGION

August 1983

Western Pacific Fishery Management Council
1164 Bishop Street, Room 1608
Honolulu, Hawaii

1.0 PREFACE TO COMBINED FINAL FMP AMENDMENT/ENVIRONMENTAL ASSESSMENT

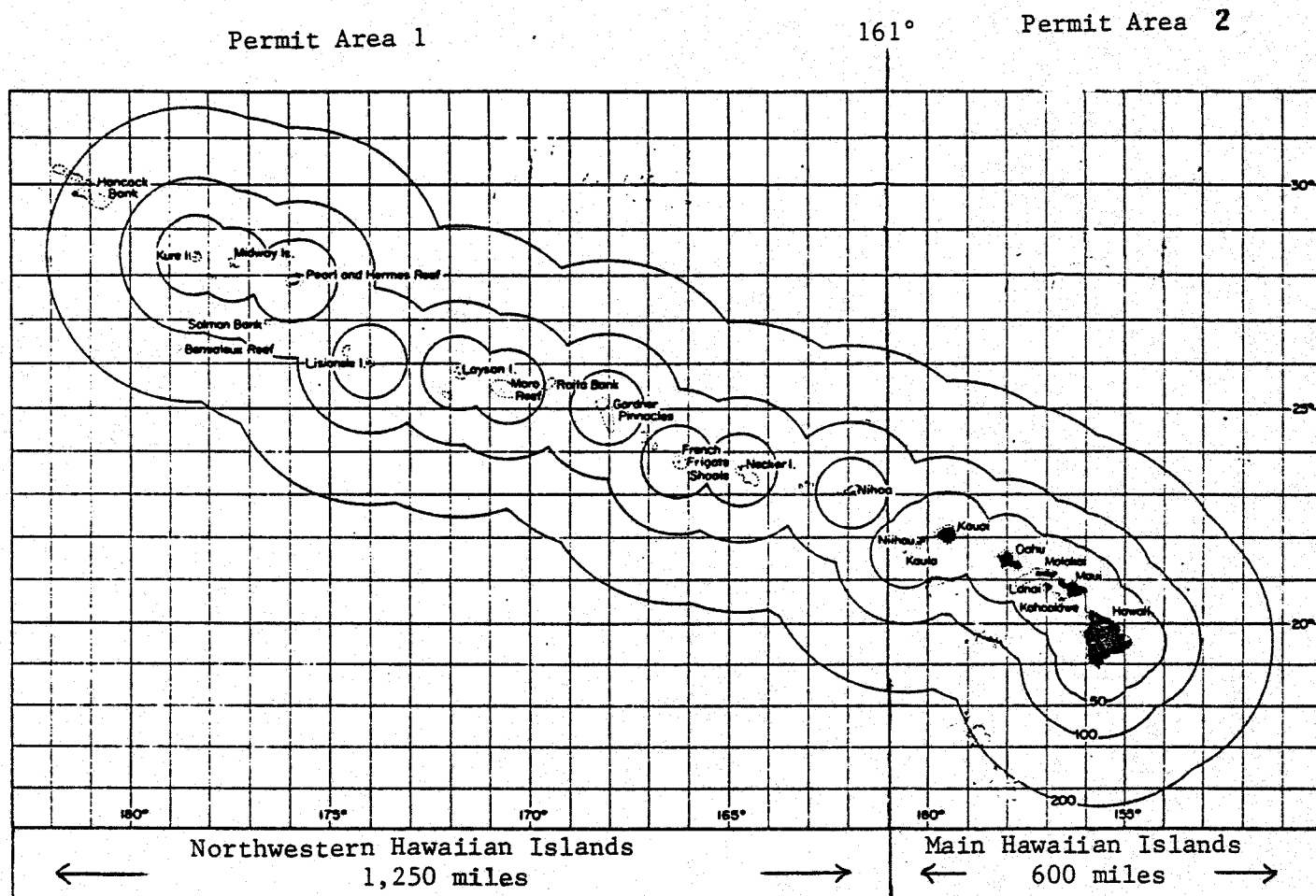
1.1 Title and Location of Proposed Action

This amendment to the Fishery Management Plan (FMP) for Spiny Lobster Fisheries of the Western Pacific Region will allow flexibility in the use of spiny lobster traps of various design while minimizing the potential for entrapment of monk seals in the Fishery Conservation Zone (FCZ) around the Northwestern Hawaiian Islands, west of 161° W. longitude (see Figure 1). The FCZ consists of the waters from the edge of Hawaii's territorial sea to a distance of 200 nautical miles from the baseline for measuring the territorial sea. Exclusive U.S. jurisdiction over all fish (except highly migratory species) in the FCZ was established by the Magnuson Fishery Conservation and Management Act (MFCMA).

1.2 Responsible Agencies

The Western Pacific Fishery Management Council (the Council) was established under the MFCMA to develop fishery management plans (FMPs) for fisheries in the FCZ around Hawaii, the territories (American Samoa, Guam) and possessions of the United States in the Pacific Ocean. After a FMP is approved by the Secretary of Commerce, it is implemented by Federal regulations and enforced by the National Marine Fisheries Service and the U.S. Coast Guard in cooperation with state and territorial agencies.

Figure 1 The Hawaiian Archipelago



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1.3 Public Review and Comment

The MFCMA requires the Council to hold public hearings in developing FMPs and amendments. This is to ensure that those who may be affected will have an opportunity to give the Council their views about the proposed action and alternatives and to provide information to the Council. The draft amendment was distributed to fishermen, government agencies and environmental organizations. Comments were received in written form, as well as at a public hearing held in Honolulu, Hawaii on July 25, 1983.

A summary of the comments and a list of commenters are provided in Section 12 of this document, together with Council responses to the issues raised. All written and verbal testimony was considered by the Council, and revisions to the amendment were made wherever applicable and appropriate. All who commented on the draft will be sent a copy of the final amendment.

1.4 Relationship to Other Laws and Policies

2. MMPA & ESA

The Spiny Lobster FMP for which this amendment is being prepared complied with the informational and procedural requirements of several other laws and directives, including the National Environmental Policy Act of 1969, the Regulatory Flexibility Act, Executive Order 12291, the Paperwork Reduction Act of 1980, and the Coastal Zone Management Act. An Environmental Impact Statement (EIS) was combined with the original FMP and was filed with the Environmental

Protection Agency. Similarly, this document serves as an Environmental Assessment (EA) for Amendment #2. This volume also includes a determination of applicability of Executive Order 12291, the Regulatory Flexibility Act, and the Paperwork Reduction Act, as well as a determination of consistency of the amendment with the approved Hawaii coastal zone management program. A companion document contains a Regulatory Impact Review for Amendment #2. The two documents contain all the information necessary under the several statutes and directives applicable to the amendment process. A copy of the original FMP and its companion Source Document (containing detailed scientific reports and appendixes) may be obtained from the Council.

1.5 List of Preparers

This FMP amendment was prepared by Council staff, the Council's Spiny Lobster Plan Development Team, and the Southwest Regional NMFS staff.

SPINY LOBSTER FMP AMENDMENT #2

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3.0 SUMMARY

A. Findings of the Fishery Management Plan (FMP)

The Fishery Management Plan for the Spiny Lobster Fisheries of the Western Pacific Region was approved by the Department of Commerce on April 12, 1982. Regulations promulgated under the FMP went into effect on March 9, 1983. The FMP will remain in effect indefinitely and may be amended as necessary. The emphasis of the FMP was directed toward conservation of spiny lobster stocks in the Northwestern Hawaiian Islands (NWHI). These are the only known stocks of significant commercial potential in the FCZ of the western Pacific region.

The following management measures are established by the FMP:

1. In the FCZ around the Northwestern Hawaiian Islands (NWHI), or Management Area 1, a number of specific conservation and management measures are imposed, including a minimum carapace size limit (7.7 cm) and tail size limit (5.0 cm.) for lobsters; a requirement that only traps can be used to harvest lobsters; a requirement that sub-legal and egg bearing (berried) female lobsters be released; a prohibition against lobster fishing in certain waters; a requirement that lobster fishermen obtain permits and submit reports on catch and effort in the fishery; and authority for NMFS to require domestic vessels to carry an observer for data collection purposes.

2. In the FCZ around the main Hawaiian Islands, American Samoa and Guam (Management Area 2), the Council did not establish a need for Federal regulations to implement conservation and management measures

other than permit and data reporting requirements and authority for NMFS to place observers on domestic vessels for data collection purposes at NMFS' discretion. However, the Council has submitted, for final approval and implementation by the Department of Commerce, FMP Amendment #1 to adopt lobster fishing regulations for the Fishery Conservation Zone (FCZ) around the main Hawaiian Islands which are the equivalent of existing State regulations. The principal concern addressed by Amendment #1 is the need for complementary management of the spiny lobster fishery in the FCZ and State waters around the main islands. Without complementary management, the effectiveness of the State's laws and regulations governing lobster fishing may be reduced or jeopardized because the State would have difficulty demonstrating the guilt of any fisherman holding a Federal lobster fishing permit for Management Area 2 who lands undersized lobsters and claims this catch was made in the FCZ rather than in State waters. A complementary management regime will increase the probability of catching violators of State laws and regulations by maintaining the effectiveness of shore-based enforcement by State and Federal authorities.

B. Need for Amendment #2

The Fishery Management Plan for the Spiny Lobster Fisheries of the Western Pacific Region was approved by the Department of Commerce on April 12, 1982. On February 7, 1983, regulations implementing the FMP were published in the Federal Register with an effective date of March 9, 1983. Approval and final implementation of the plan were delayed because of Coastal Zone Management consistency issues raised by the State of Hawaii. Soon after the publication of the final

regulations, the National Marine Fisheries Service discovered that many of the lobster traps in use in the spiny lobster fishery in the NWHI did not meet the entryway opening requirements of the regulations which apply to Management Area 1. During the period between Plan approval and implementation of the regulations, new traps had been brought into the fishery. The regulations specifically require that the entryway of a spiny lobster trap measure no greater than 10.5 inches in the greatest diagonal or diameter at the outer opening and no greater than 6.5 inches in the greatest diagonal or diameter at the inner opening. The entryway opening requirements are only one of several measures in the FMP and implementing regulations designed to minimize any potential impacts of the lobster fishery on the Hawaiian monk seal, an endangered marine mammal in the NWHI.

Because most of the traps now in use in the NWHI spiny lobster fishery do not conform to the entryway measurements specified in the existing regulations, a rule change is needed to prevent disruption or curtailment of the fishery. After review and analysis of this issue, the Council concluded that monk seals would still be protected from becoming caught in the entryways of traps, and that the fishermen's ability to use a greater variety of traps could be enhanced and their financial hardships minimized, by changing the entryway opening regulation. The intent of the amendment is to permit a wider range of lobster trap designs in the spiny lobster fishery in the NWHI, while still affording protection to the Hawaiian monk seal.

C. Proposed Action

This amendment is limited to the issue of trap entrance measurements. The Western Pacific Regional Fishery Management Council has determined that an

emergency exists in the spiny lobster fishery in the NWHI because most of the traps being used by the fishermen are illegal under the existing regulations. The Council directed that immediate action be taken to amend the existing trap opening regulation so that the lobster fishery will not be disrupted or curtailed. Specifically, the Council voted to eliminate the outer opening requirement and to change the inner opening size measurement method. The Council approved proposed language that would require that the smallest opening of an entryway of any spiny lobster trap may not allow any sphere or cylinder greater than 6.5 inches in diameter to pass from outside the trap to inside the trap. The change in the trap entryway opening requirement will maintain a 6.5 inch measurement to prevent the possible entrapment of monk seals, while allowing the use of a more oblong opening in traps. By unanimous vote at its May 23-24, 1983 meeting, the Council requested the Secretary of Commerce to implement this rule change as an emergency action in order to prevent curtailment of the NWHI spiny lobster fishery. The emergency regulation became effective on July 6, 1983 and can remain in effect for 180 days. The Council now proposes to amend the FMP and implementing regulations. This action will, upon approval and implementation, permanently establish the emergency interim provision.

D. Alternatives Considered but Rejected

1. Enforce the existing regulations which restrict trap opening dimensions. This would eliminate the cost of preparing and processing this amendment but would be a hardship for lobster fishermen who would have to modify or replace gear in which they have an investment. Wire traps may have the proper dimensions when new but trap entrances

distort with use. Therefore, wire traps would have to be reshaped routinely and continually measured to ensure compliance of this gear type with the existing regulations. Furthermore, this alternative would prevent the use of some gear, such as the plastic trap, that may be more efficient in catching lobster and safer for monk seals.

2. Amend the existing regulations to eliminate the size restriction on lobster trap entryways. Although the risk to monk seals presented by lobster traps is unknown and there have been no reports of entrapment in thousands of trap-nights in the NWHI lobster fishery, the biological opinion for the Spiny Lobster FMP considered a maximum dimension restriction of 6.5 inches necessary to prevent adult monk seals from becoming entrapped in the inner trap opening. This alternative would provide a lower level of protection than required by the biological opinion, although it would provide the flexibility to use a wide range of trap designs.

1. Amend existing regulations to exempt traps in use as of March 9, 1983 (the effective date of the regulations) from the entryway measurement but enforce the rule for traps introduced to the fishery after that date. This would allow the present fishery to continue without disruption but would limit new or replacement gear. By allowing the continued use of wooden slat traps without modification, this alternative provides a lower level of protection to monk seals than required by the biological opinion on the approved FMP. This alternative would also discourage fishermen from increasing efficiency through the introduction of new traps of various designs.

E. Determinations in the Amendment

This amendment does not alter any of the determinations in the approved FMP. There are insufficient data to determine a precise estimate of maximum sustainable yield (MSY) for the stock(s) of lobsters in the NWHI and other portions of the FCZ. The Council has concluded that the maximum sustainable yield for the stock in the NWHI with a minimum size limit of 7.7 cm CL is likely to be in the range of 168,000 to 420,000 lobsters per year.

The Council concluded that a non-numerical definition of optimum yield (OY) for the fishery is appropriate under the FMP. OY is defined as "the greatest catch of non-berried lobsters with a carapace length of 7.7 cm or larger which can be taken from the waters of the FCZ which are deeper than 10 fathoms throughout the NWHI and more than 20 miles from Laysan Island."

In the long-term, the OY will likely be less than the MSY for the stock because area closures, release of berried lobsters, and low-density populations of legal-sized lobsters will effectively prevent or discourage exploitation of all portions of the stock. In the short-run, harvests will likely exceed MSY levels as the "surplus" of large lobsters accumulated over time is harvested. For purposes of monitoring and plan evaluation, however, the Council estimates that OY will be within the following ranges in the future:

First year	356,000 to 772,000 lobsters
Second year	281,000 to 609,000 lobsters
Third and future years	168,000 to 420,000 lobsters

This range is neither a quota nor a harvest target, nor a harvest guarantee. Deviation from this range in any single year will not be cause for concern given

the unknowns about stock abundance, population dynamics, natural environmental fluctuations, and the economics of the NWHI lobster fishery. If reproductive capacity is protected so that the resource can maintain itself and provide for a commercially-viable fishery, then the absolute level of harvest is immaterial.

Domestic vessels currently in the fishery have demonstrated the capability to harvest the OY. Therefore, the total allowable level of foreign fishing (TALFF) is zero. A large percentage of the lobster catch is expected to be processed onboard fishing vessels. There is no "surplus" of domestic harvest capacity over processing capacity and the amount available for joint venture processing (JVP) is zero.

4.0 FISHERY MANAGEMENT UNIT

The spiny lobster fishery management unit in the original FMP includes commercial, recreational and subsistence fishing for spiny lobster (Panulirus spp.), with incidental catches of slipper lobster (family Scyllaridae) and, rarely, Kona crab (family Raninidae). There are four distinct components described in the FMP: the main Hawaiian Islands fishery, the Northwestern Hawaiian Islands (NWHI) commercial fishery, and small fisheries in American Samoa and Guam. This amendment deals only with the Northwestern Hawaiian Islands spiny lobster fishery (Management Area 1). Other components will continue to be managed as described in the original FMP or as proposed in FMP Amendment #1.

5.0 PROBLEMS AND ISSUES

The existing spiny lobster regulations specifically require that the entryway of a spiny lobster trap measure no greater than 10.5 inches in the greatest diagonal or diameter at the larger end, and no greater than 6.5 inches in the greatest diagonal or diameter at the smaller end. The principal issue addressed by this amendment is the need to allow fishermen greater flexibility in the use of lobster traps of various design, while still affording protection of the Hawaiian monk seal.

Implementation of trap entryway opening restrictions developed from the concern that monk seals, while searching for food, could possibly be caught in lobster traps and drown. There are no records of seals being caught in lobster traps, but the possibility of harm, no matter how remote, was the reason for restricting the dimensions of trap entrances. Openings were measured on then-existing traps, and measurements were taken of the cranial circumference of dead monk seals. The diameter of monk seal skulls ranged from 5.1 inches for a pup of unknown age to 7.6 inches for an adult.

"California" two-chambered wire traps were the only gear type in use in the NWHI spiny lobster fishery as the plan was being developed. The entryway measurements of then-existing wire traps were adopted as part of the regulations because (1) the traps were being used in the fishery with no documented monk seal problems; and (2) the opening was small enough that, based upon the cranial measurements, most monk seals could not get their heads inside the trap. The Council included the trap entryway measurements in the FMP because it concluded that the restriction would not disrupt the existing fishery and that it would

prevent the future use of traps with larger openings which might be dangerous to the seals.

Two problems related to traps in the fishery have since developed: (1) the openings in wire traps distort as the result of stacking and use; and (2) traps of various designs with different entryway openings have entered the fishery since final approval of the FMP.

On March 8, 1983, 100 sample lobster traps were measured. Because of stacking and use, most openings of the traditional wire traps were oblong rather than round. The most consistent measurement was 9.5 inches x 11.5 inches at the large opening, and 6.5 inches x 5.5 inches at the small opening. According to the existing regulations, the dimensions of the large opening makes these traps illegal. This gear type comprises about 49% of the traps used by recently active vessels in the NWHI lobster fishery.

A molded plastic trap which folds in half for easy stacking has been purchased by some lobster fishermen. The easy stacking of these traps is a significant benefit to lobster fishermen because it enables a large number of traps to be transported to the fishing grounds, approximately 450 to 900 nautical miles from port. The openings of these traps are oblong. The outer openings of the traps measure 11 inches x 12.75 inches and the inner openings measure 7 inches x 3.5 inches. The outer opening now is illegal because it exceeds 10.5 inches in the greatest diagonal and the inner opening now is illegal because it exceeds 6.5 inches in the greatest diagonal. This gear type comprises about 14% of the traps used by recently active vessels in the NWHI lobster fishery. If the current regulations are not amended, most of the wire traps and all of the molded plastic traps in the fishery would have to be

modified or replaced. A wire and wooden slat trap has been introduced to the NWHI lobster fishery from the Caribbean lobster fishery. The outer and inner openings are square and the same size, 7.5 inches on each side; therefore, they also are illegal. This gear type comprises about 37% of the traps used by recently active vessels in the NWHI lobster fishery.

Because most of the traps now in use in the NWHI do not conform to the entryway measurements specified in the existing regulations, a rule change is needed to prevent disruption or curtailment of the fishery. In order to maintain the level of protection to monk seals required by the biological opinion on the FMP, the proposed rule change would eliminate the restriction on the dimensions of the outer openings of lobster traps and would substitute a new method of measuring the inner opening. The traps now in use would not need to be replaced, but the wooden slat traps, which comprise 37% of the gear in recent use, would have to be modified.

6.0 OBJECTIVES

The objectives listed in the FMP continue to be valid for management of the NWHI spiny lobster fishery:

1. To assure the long-term productivity of western Pacific spiny lobster stocks and to prevent overfishing;
2. To promote the efficient contribution of western Pacific spiny lobster resources to the United States economy;
3. To collect and analyze biological and economic information about western Pacific spiny lobster fisheries and improve the basis for management and conservation in the future; and,
4. To prevent unfavorable impacts of the fishery on the Hawaiian monk seal and other threatened and endangered species.

7.0 DESCRIPTION OF THE FISHERY

7.1 Description of the Stocks

The FMP summarizes most of the information available on the abundance, distribution, and population dynamics of spiny lobster stocks in the Northwestern Hawaiian Islands. Two species of spiny lobsters, locally known as ula, are of commercial importance in Hawaii. Panulirus marginatus is more abundant than P. penicillatus in the Northwestern Hawaiian Islands. The latter species is less catchable in traps; therefore the NWHI trap fishery is primarily a single-species fishery (P. marginatus).

7.2 Habitat

There is nothing to add to the discussion in the FMP.

7.3 Resource Management Jurisdiction

7.3.1 Coastal Zone Management (CZM)

Section 307(c)(1) of the Federal Coastal Zone Management Act of 1972 (CZMA) requires that all Federal activities which directly affect the coastal zone be consistent with approved State coastal zone management programs to the maximum extent practicable. The Council has submitted, for final approval and implementation by the Department of Commerce, FMP Amendment #1 to establish measures for the FCZ around the main Hawaiian Islands which are complementary to existing State lobster fishing regulations for that region.

On June 6, 1983, the State of Hawaii put into effect amended regulations governing lobster fishing in the territorial waters around the NWHI. The State

regulations impose the same 10½-inch outer diameter and 6½-inch inner diameter trap entrance dimensions as the approved FMP and implementing Federal regulations. Amendment #2 will result in a different method of measuring trap entrance dimensions, so that the State's Administrative Rule, Chapter 13-89, will differ from the FMP when the amendment becomes effective.

While it is the goal of the Council and the State to have complementary management measures, Federal and State administrative procedures vary and amendments may not be fully instituted at the same time. The State Department of Land and Natural Resources (DLNR) has stated its intention to maintain its Administrative Rule in consonance with changes emanating from this or subsequent FMP amendments. Until the State rule is amended, the DLNR plans to implement any changes put into effect through FMP amendments by specifying them as conditions of the Northwestern Hawaiian Islands Taking Permit, issued by the DLNR for commercial fishing operations in that region.

Based upon the assessment of the amendment's impacts in Section 9, the Council has concluded that Amendment #2 is a refinement to the Federal management measures and is consistent to the maximum extent practicable with Hawaii's approved Coastal Zone Management Program. This amendment will not change the Federal regulations which apply to spiny lobster fisheries in the FCZ around American Samoa and Guam (Management Area 3). Therefore, previous coastal zone consistency determinations continue to apply for the regulations which implement the FMP in Management Area 3.

7.3.2 Endangered and Threatened Species

During the development of the FMP, the Council requested formal

consultation under section 7 of the Endangered Species Act. A National Marine Fisheries Service biological opinion dated February 18, 1981, considered the potential impacts of the fishery on the Hawaiian monk seal, an endangered marine mammal in the NWHI. Several regulatory measures in the FMP are intended to protect monk seals. These measures, in addition to the trap opening requirement, are: (1) lobsters may only be taken by traps or by hand; (2) observers may be required at the request of the NMFS Regional Director; (3) certain inshore areas of the NWHI are closed to the fishery; (4) emergency protective measures may be implemented if the Regional Director receives a report of a monk seal death that appears to be related to the fishery; and (5) fishermen are subject to specific recordkeeping and reporting requirements.

The biological opinion considered the possibility that monk seals searching for food might be caught in the entryways of lobster traps and drown. It stated that a 6.5-inch maximum dimension restriction of the inner trap opening might prevent adult monk seals from becoming entrapped. The opinion concluded that the FMP contained safeguards to reduce adverse impacts to monk seals from the lobster fishery and recommended that the plan be implemented with provisions for emergency closures in the event that fishery-related mortality of monk seals occurred.

This amendment proposes a change in the measurement of trap opening dimensions that is as protective as the dimensions considered in the biological opinion because it prevents the same size class of monk seals from becoming entrapped. In some instances the new traps are likely to be safer. For example, the 3.5-inch inner dimension of the plastic trap

opening is likely to prevent weaned seal pups from becoming entrapped. The proposed rule change will maintain a 6.5-inch measurement to prevent the possible entrapment of monk seals while allowing the use of a more oblong opening in traps. It will not require modification of the wire or the plastic traps; however, it will require some modification of the wooden slat trap. The proposed change in the regulation is consistent with the conclusions of the biological opinion; therefore, reinitiation of the consultation process is not necessary.

The FMP contains a list of other endangered and threatened species in the Western Pacific Region. None will be affected by this FMP amendment.

7.4 Description of Fishery Activities

After a 1975 research cruise by the National Marine Fisheries Service demonstrated the commercial potential of the spiny lobster resource around Necker Island and a few other areas of the Northwestern Hawaiian Islands (NWHI), the distant-water trap fishery expanded rapidly. The exploratory survey prompted commercial vessels, beginning in 1976, to harvest spiny lobster for the live, whole lobster market in Hawaii. In 1977, these vessels produced record landings of 72,000 pounds of spiny lobster. The local market was unable to absorb this quantity of fresh lobster, and fishing operations shifted to at-sea processing and freezing of lobster tails to supply the large international export market for this commodity. The tails are weighed, size-graded, and packed by a Honolulu processing firm.

In 1980, three large vessels entered the lobster fishery in the NWHI, and landings for that year increased to 328,000 pounds (whole weight). Landings peaked at 780,000 pounds in 1981, when 10 vessels participated in the distant-water trap fishery. There are presently fewer boats in the spiny lobster fishery than in 1981. The boats are smaller, carry fewer traps, and make fishing trips of shorter duration than previously. All these factors contributed to reduced landings of approximately 185,000 pounds in 1982. Table 1 summarizes statistical trends in the Northwestern Hawaiian Islands' spiny lobster fishery.

Table 1. Trends in the Northwestern Hawaiian Island Spiny Lobster Fishery.

Year	Landings. (lb.)	Ex-Vessel Price	Revenue	Number of Boats	Number of Trips
1977	72,000	\$2.90	\$ 208,800	5	14
1978	*	*	*	*	*
1979	*	*	*	*	*
1980	328,000	3.40	1,115,000	3	12
1981	780,000	3.50	2,730,000	10	25
1982	184,500	3.60	664,200	6	18

* Data not disclosed because fewer than 3 vessels were in the fishery.

Source: Honolulu Laboratory, Southwest Fisheries Center,
National Marine Fisheries Service

The FMP projected that, in the initial years of the fishery, a surplus of older lobsters would be taken from the previously unfished stock. After the virgin stock is reduced, the FMP anticipated a possible range of annual harvest between 168,000 and 420,000 lobsters of 7.7 cm carapace length or larger. Estimated annual landings in 1980 and 1982 were within this range but the 1981 catch exceeded this range by a considerable margin.

At present, 3 vessels are active in the Northwestern Hawaiian Islands' spiny lobster fishery, and several others fished in 1982. The number of traps used by recently active vessels totals approximately 2,140, distributed as follows:

Wire traps	1,050	49.1
Plastic traps	290	13.6
Wooden slat traps	<u>800</u>	<u>37.4</u>
	2,140	100.1

The plastic traps are proving to be more efficient, with catch rates up to one-third higher than the other gear types. This factor is likely to encourage greater use of plastic traps, and it is predicted that this gear type will replace many of the wire and wooden traps in the future.

7.5 Economic Characteristics of the Fishery

When the NWHI spiny lobster fishery began, some believed that its potential was as good as that of other lobster fisheries throughout the world. Potential yield from the NWHI grounds based on extrapolations of initial catch rates seemed encouraging; however, as with many new, developing fisheries, once the initial stock was reduced by heavy fishing, enthusiasm subsided. It has been demonstrated that the NWHI stocks do not produce catches as high as what populations elsewhere in the world are capable of sustaining. Furthermore, in the NWHI fishery, risks are high as vessels have to travel ^{nautical} 1,700 ~~21~~ miles round trip to fish at Necker and Maro Reef, the only two areas with commercial concentrations of spiny lobsters.

Lobster tails processed at sea and landed in Honolulu currently receive ex-vessel prices in the \$6.50 - \$7.50 range, whereas live lobster is sold whole for prices averaging \$5.50 per pound. Lobster tails are occasionally sold directly to the U.S. mainland buyers if prices are high. Despite relatively high-priced products, the NWHI spiny lobster fishery is not likely to support

more than a few full-time vessels. Economic projections in the FMP suggest that after initially high catch rates are reduced to the level of the maximum sustainable yield, the relatively low density of the NWHI lobster population may make it difficult, if not impossible, to achieve the scale of production large vessels need to recover operating costs, particularly with high fuel prices and the long distances traveled. Several vessels have withdrawn from the NWHI lobster fishery, and there is a nearly constant turnover of participants. Although there may be unexploited spiny lobster stocks in the northern reaches of the Northwestern Hawaiian Islands, fishermen are currently harvesting grounds in the southern to middle reaches of that region to keep operating costs down.

Any single-species fishery which involves travel to distant waters and in which the areas of proven resource concentration are limited is economically risky. The future of the fishery will depend to a large extent on the operation of multi-species fishing boats that can participate in the various fisheries being developed in the NWHI. One of the major objectives of the Spiny Lobster FMP is to provide a stable fishery from which vessels can receive income while exploring other distant-water fisheries which will create a multi-resource base.

7.6 Socio-Cultural Framework

There is nothing to add to the discussion in Section 7.6 and 7.7 of the original FMP. Spiny lobsters have no known cultural significance to particular sectors of the fishing community. The Council is aware of expressed concerns about native Hawaiian fishing rights. State law recognizes certain fishing rights as being the private property of the konohiki, for the waters from the beach to the reefs or to a distance one mile from the beach if there is not a reef (Ch. 188-4 HRS). This plan amendment will not affect those rights.

8. ALTERNATIVE MANAGEMENT STRATEGIES

The Council has considered four alternative strategies to deal with the lobster trap entryway measurement issue. These are described in the following sections.

A. Alternative 1: No Action

Under this alternative, the FMP would not be amended at this time. The owners of lobster traps with illegal entryway dimensions would have to modify or replace their gear in order to continue lobster fishing in the NWHI. The plastic traps, which comprise almost 14% of the actively-used gear, cannot be easily modified and would have to be replaced, at a cost of approximately \$35 each. The inner chamber of the "California" two-chambered wire traps, which comprise 49% of the existing gear, would have to be reshaped and measured routinely because the openings would tend to distort to illegal dimensions with use. The wire traps are constructed at a cost of \$40 each. The "Caribbean" wooden slat traps, which are constructed at a cost of \$25 per trap, would have to be modified by placing one additional slat across the top entrance in order to narrow its opening.

Although this alternative would afford the level of protection to the monk seal considered necessary in the biological opinion, it would result in added costs to fishermen. Furthermore, it would prevent the use of some gear, such as the plastic trap, that could be more efficient in catching lobster and safer for the monk seal.

B. Alternative 2: Eliminate the Size Restriction on Lobster Trap Entrances.

The probability of monk seal entrapment in lobster trap entrances larger than 6.5 inches is unknown, and there have been no reports of entrapment in thousands of trap-nights in the NWHI lobster fishery. Nevertheless, the biological opinion for the Spiny Lobster FMP considered a maximum dimension restriction of 6.5 inches necessary to prevent adult monk seals from becoming entrapped in the trap opening. This alternative would afford a lower level of protection than considered necessary by the biological opinion.

Research in the NWHI indicates that the largest size class of the NWHI spiny lobster population (over 15 cm CL) observed by divers is catchable in traps having a 6.5-inch entrance. Thus, there is no evidence that traps with larger entrances will catch larger lobsters than are taken with traps having 6.5-inch entryways.

C. Alternative 3: "Grandfather" Option

This alternative would allow the continued use of traps which were in use when the Federal regulations came into effect on March 9, 1983, while preventing the introduction of new or replacement traps not in conformance with the entrance dimensions specified in the existing regulations. In effect, existing gear would be "grandfathered", so that fishermen who had invested in traps prior to the implementation of regulations for the NWHI lobster fishery would not lose their investment. The existing entryway restrictions would be enforced for gear brought into the fishery after the effective date of the regulations. This alternative would retain restrictions on both the outer entryway dimensions and inner entryway dimensions of new traps and would tend to exclude gear other than

the "California" two-chambered wire trap, whose funnel-shaped entryway has distinctive "outer" and "inner" openings.

Each new trap design which is introduced to the fishery could have a different efficiency, and these differences could introduce variation in catch per unit of effort, complicating the problem of data analysis and stock assessment. This additional variable could be eliminated by specifying one gear type, which the existing regulations, in effect, do.

However, there are several reasons why this alternative is not warranted:

1. It is too burdensome on fishermen to stipulate only one trap design. This discourages innovation and improved efficiency in the fishery, while not achieving a higher level of protection for the monk seal than Alternative #4. The variation in catch per unit of effort which could result from different gear traps is a research problem. This can be addressed more efficiently through field surveys designed specifically to study the variation in catch rates and length-frequency of the lobster catches resulting from gear variations than through restricting the flexibility of fishermen to use traps of different designs.

2. Even if the openings of wire traps had the proper measurements when first constructed, the entrance dimensions distort with use. To assure compliance with the existing regulations would require routine reshaping, as well as monitoring, of trap entrances. This would increase enforcement difficulty and add costs to fishermen.

3. The continued use, without modification, of wooden slat traps, which comprise 37% of the existing gear, would provide a lower level of protection to the monk seal than considered necessary by the biological opinion.

D. Alternative 4: Eliminate the Outer Opening Requirement and Change the Inner Opening Measurement Method.

Section 681.24, paragraph (b), presently reads as follows:

"An entryway in a spiny lobster trap may measure no greater than 10½ inches in its greatest diagonal or diameter at the larger end, and no greater than 6½ inches in its greatest diagonal or diameter at the smaller end."

This alternative would revise paragraph (b) to read as follows:

"The smallest opening of an entryway of any spiny lobster trap may not allow any sphere or cylinder greater than 6.5 inches in diameter to pass from outside the trap to inside the trap."

In the biological opinion for the Spiny Lobster FMP, the adequacy of trap design for preventing entrapment of monk seals was considered. It was stated that a 6.5-inch maximum dimension restriction of the inner trap opening would prevent adult monk seals from becoming entrapped, but that weaned pups could become entrapped. The various trap designs presently in use were reviewed at a March 22, 1983 session between the members of the Council's Spiny Lobster Plan Development Team, NMFS personnel, and the Chairman of the Hawaiian Monk Seal Recovery Team. It was determined that, despite dimensions not in conformance with Section 681.24 of the existing regulations, the entryways of

wire traps and plastic traps are as protective as required by the biological opinion because they prevent the same size of monk seals from becoming entrapped. Because of somewhat wider openings (7.5 inches), the wooden slat traps may present a greater risk for monk seal entrapment, but this gear type can be modified to satisfy the measurement method proposed in this amendment by placing an additional slat across the top entry of the trap.

The Council heard public comments on the trap problem and discussed the issue at its May 23-24, 1983, meeting. The traps in use by fishermen were displayed at the meeting and the problem of entrapment was reviewed. From the information presented, the Council decided that, to prevent curtailment of the NWHI lobster fishery, flexibility in the design of traps should be allowed as long as the potential for entrapment of monk seals was minimized. This alternative will allow continued use of 63% of the traps (1,050 wire and 290 plastic traps) which have been used by vessels recently active in the NWHI spiny lobster fishery. The wooden slat traps, which comprise 37% of the gear, would require some modification.

9. IMPACTS OF ALTERNATIVE STRATEGIES

The harvest of spiny lobsters in the Northwestern Hawaiian Islands is presently regulated under the approved Fishery Management Plan for the Spiny Lobster Fisheries of the Western Pacific Region. Restrictions on the maximum entrance dimensions of lobster traps are only one of several measures in the existing regulations. This amendment is limited to the issue of trap entrance measurements, which were originally adopted to protect monk seals. The proposed action would not result in impacts significantly different in context or intensity from those described in the previous Environmental Impact Statement (EIS) published for the regulations implementing the FMP.

This section considers the benefits and costs and assesses the impacts of the proposed action. The categories of impacts are as follows:

Biological/Physical - Impacts on:

- Spiny lobster stock(s)
- Endangered or threatened species
- Habitats

Economic - Impacts on:

- Productivity and efficiency
- Costs and revenues of fishery and support activities
- Small business entities
- Employment

Enforcement and Administration - Impacts on:

Enforcement costs

Government administrative costs

Reporting and data collection burdens

Plan amendment costs

The following analysis addresses the impacts of the four different strategies being considered and compares the alternatives relative to achieving the objectives of the FMP. The costs and benefits are weighed to select the alternative which provides maximum net benefits relative to the others.

A. No Action (Alternative 1)

1. Biological/Physical Impacts

The biological condition of NWHI spiny lobster stocks and impacts on endangered or threatened species and their habitats would be unchanged from existing regulations. Implementation of trap entrance opening requirements developed from the concern that monk seals, while searching for food, could possibly be caught in lobster traps and drown. Openings were measured on traps in use in the fishery as the FMP was being developed, and measurements were taken of the cranial circumference of dead monk seals. The diameter of monk seal skulls ranged from 5.1 inches for a pup of unknown age to 7.6 inches for an adult. The biological opinion for the FMP considered a trap opening dimension of no greater than 6.5 inches as a precaution to possibly prevent adult monk seals from becoming entrapped.

2. Economic Impacts

If existing regulations are not amended, fishermen will have to bear the trouble and cost of modifying or replacing gear in which they have an investment. The wire traps which comprise 49% of the gear recently used in the NWHI lobster fishery will not have to be replaced, but they will have to be modified. In fact, to remain in conformance with the trap entrance restrictions, the wire trap entrances will have to be constantly reshaped.

If each of the 1,050 wire traps has to be modified once a year (after the winter months of rough ocean conditions which distort trap entrance dimensions), at an estimated cost of \$4 per trap, this alternative would result in an added annual cost of \$4,200 to the fishermen using this gear type.

This alternative will require the replacement of the 290 plastic traps presently used in the NWHI lobster fishery. This gear type is proving more efficient, producing catch rates up to one-third higher than the other gear types in the fishery. At a cost of \$35 each, an investment of \$10,150 will be lost. An equivalent number of wire traps, costing \$40 each to construct, would be needed as replacement gear. Thus, the total cost of this alternative to the fishermen now using plastic traps would be \$21,750. In addition, fishermen would lose the benefits of greater efficiency and higher catch rates afforded by the plastic traps. It is estimated that spiny lobster production in the NWHI fishery will increase by some 50,000 pounds per year, valued at \$180,000, if vessels which currently use wire or wooden traps, converted entirely to plastic traps.

The 800 wooden slat traps presently in use would not have to be

replaced but would need to be modified by placing an additional slat across their top entrances. At an estimated cost of \$2.50 per trap, this modification would cost the fishermen using this gear type a total of \$2,000.

If the existing regulations on trap entrance dimensions are enforced, the spiny lobster fishery would be temporarily disrupted, with a short-term loss of income, until traps with "legal" entrance dimensions can be constructed or purchased. However, this disruption is not likely to exceed one month. The loss of one month of lobster fishing, based on the range of fishing effort and landings which occurred during the 1980-1982 period, would cost fishermen an average of \$55,000 to \$139,000. This estimate is derived by dividing the 1980-1982 values in Table 1 by 12 months of the year. Present lobster fishermen might elect to avoid this burden and leave the fishery. If potential participants were similarly discouraged, the fishery might be curtailed, with a long-term loss of income ranging from \$600,000 to \$1.5 million per year, based on the range of annual revenue generated by fishing activities in the 1980-1982 period. Processing and vessel support activities would be similarly affected.

3. Administrative Impacts

The cost of enforcing the trap opening restrictions in the existing regulations would continue. The 290 plastic traps need only be measured once. At a rate of 2 traps per minute, 2.4 hours of enforcement time are required. The 800 wooden slat traps also can be checked once. At a rate of 2 traps per minute, 6.67 hours of enforcement time are required. The entrance dimensions of wire traps distort with use and will require periodic rechecking. If all 1,050 wire traps were checked twice a year, at a rate of 2 traps per minute, 17.5 hours of enforcement time would be required. For a GS-11 enforcement agent paid

a salary and standard overtime at a rate of \$20 per hour, the enforcement time of 26.6 hours required to check all types of traps is valued at \$531.

The cost of preparing and processing this amendment, approximately \$2,500, could be avoided by maintainin^g the existing regulations.

B. Eliminate Restrictions On Trap Entryway Dimensions (Alternative 2)

1. Biological/Physical Impacts

Research in the NWHI indicates that traps having 6.5-inch entryway openings can catch the largest size class of spiny lobster in the existing population. There is no evidence that the larger trap openings permitted under this alternative would result in the capture of larger lobsters or increase catch rates, so the biological condition of the NWHI lobster stocks would not be affected differently from the existing regulations.

This alternative would provide a lower level of protection to the monk seal than considered necessary in the biological opinion and the FMP. Considering the endangered status of the monk seal, it must be assumed that elimination of all trap opening restrictions will be detrimental to monk seals. Although there is no evidence, the biological opinion on the FMP established the 6.5-inch measurement as the maximum for trap entryway openings. Other endangered or threatened species and their habitats would be unaffected.

2. Economic Impacts

Elimination of the restrictions on trap entrance dimensions would allow fishermen to use all existing traps without modification or replacement and would provide flexibility to introduce a wide range of other trap designs which

could improve the efficiency and profitability of the fishery. An estimated \$28,000 could be saved, relative to the existing regulations, by avoiding the cost of replacing or modifying existing traps. There would be no short-term disruption of the fishery, at a cost of \$55,000 to \$139,000 to replace "illegal" traps. The fishery could continue to generate income in the range of \$600,000 to \$1.5 million per year, and processing and vessel support activities could continue without disruption.

3. Administrative Impacts

There would be no need to measure trap entrance dimensions under this alternative. An estimated \$531 could be saved relative to maintaining the existing regulations. The approved FMP would have to be amended to implement this alternative. The cost of preparing and processing such an amendment is estimated to be \$2,500.

C. "Grandfather" Option (Alternative 3)

1. Biological/Physical Impacts

This alternative would minimize the risk of monk seal entrapment in new traps to the same degree as the existing regulations, while allowing the continued use of existing traps. Approximately 800 wooden slat traps having top entrances measuring 7.5 inches across could be used without modification. This opening is somewhat larger than the maximum of 6.5 inches considered by the biological opinion to minimize the risk of monk seal entrapment. Although the available data suggest that monk seals have not become entrapped by lobster traps, the wooden slat traps exceed the accepted standard and must be assumed to have a biological impact. From available information, other traps that exceed

the opening requirement also have an impact. No other endangered or threatened species or their habitats would be affected.

The entryway dimensions of wooden slat traps do not appear to affect productivity so there would be no impact on the biological condition of the NWHI spiny lobster stocks different from that of the existing regulations.

2. Economic Impacts

All existing traps could be used without replacement or modification. Compared to maintaining the existing regulations (Alternative 1), this alternative would result in a savings of \$28,000 to the fishermen and would avoid a temporary disruption of the fishery, at a cost of \$55,000 to \$139,000, to replace "illegal" gear. Compared to Alternative 4, this alternative would avoid \$2,000 of cost to modify the entryways of 800 wooden slat traps.

Although the existing plastic traps could be used without replacement, new traps of this type could not be brought into the fishery. Plastic traps are proving to be the most efficient gear type, with catch rates up to one-third higher than the other types of traps. By having to conform with the entrance dimension requirements for gear introduced to the fishery after March 9, 1983, fishermen would not be able to convert to plastic traps and obtain the benefits of greater efficiency and higher catch rates.

It is estimated that spiny lobster production in the NWHI fishery could be increased by some 50,000 pounds per year, valued at approximately \$180,000, if vessels which currently use wire or wooden slat traps converted entirely to plastic traps. This alternative would not permit such a conversion, nor would it allow for the introduction of new and previously untested trap designs which

could also prove more efficient than the "California" two-chambered wire traps which predominated in the early years of the fishery.

3. Administrative Impacts

The difficulty and cost of FMP administration and enforcement would be increased by the need to distinguish lobster traps in use as of March 9, 1983, from newer traps. This would require some kind of trap marking or tagging program. At an estimated cost of \$2 per trap, such a program would increase enforcement costs by some \$4,280. This added cost would be partially offset by the savings from not needing to measure the entrance dimensions of the 2,140 tagged traps, or an estimated \$531 of enforcement time.

As the existing traps age and require replacement with new gear, there would be a need to measure the entrance dimensions of new traps to assure that they conform with the existing regulations. The cost of enforcement time would depend upon the number of new traps brought into the fishery over time and cannot be reliably estimated.

An amendment to the approved FMP would be required to implement this alternative. The cost of preparing and processing this amendment would be about \$2,500.

- D. Eliminate the outer opening requirement of Section 681.24, paragraph (b), and change the inner opening measurement method (Preferred Alternative)

1. Biological/Physical Impacts

This alternative affords the same level of protection to the Hawaiian

monk seal as the existing regulations (Alternative 1) because it prevents the same size of monk seal from becoming entrapped in trap openings (see Section 5.0 and 8.0). Other endangered or threatened species and their habitats are not affected by the size of lobster trap openings. Therefore, this alternative has no impact on them.

The biological condition of spiny lobster stocks is controlled by maintaining the reproductive potential of the population through size limits and area closures, not by trap opening requirements.

2. Economic Impacts

This alternative will allow the continued use, without modification or replacement, of 1,050 wire traps and 290 plastic traps used by vessels recently active in the NWHI spiny lobster fishery. Compared to maintaining the existing regulations (Alternative 1), this alternative will save fishermen nearly \$26,000. Moreover, fishermen will be free to replace existing gear with plastic traps, which are proving more efficient, with catch rates up to one-third higher than wire or wooden traps. It is estimated that spiny lobster production in the NWHI fishery will increase by some 50,000 pounds per year, valued at \$180,000, if vessels which currently use wire or wooden traps, converted entirely to plastic traps. This alternative would provide the flexibility to introduce new but untried trap designs to the fishery.

The wooden slat traps presently in use would not have to be replaced but would need a simple modification to conform to the proposed rule change. At an estimated cost of \$2.50 per trap, this modification will cost a total of \$2,000 for 800 traps. One vessel, which carries over 200 traps of this type,

has already modified its slat traps without any disruption in fishing operations, so this alternative is not expected to curtail the fishery.

This alternative will not discourage present or future participation in the NWHI spiny lobster fishery, so it will continue to generate ex-vessel income ranging from \$600,000 to \$1.5 million per year. Likewise, processing and vessel support activities can also continue.

3. Administrative Impacts

This alternative will reduce enforcement time from 30 seconds per trap to 10 seconds per trap by eliminating the need to measure the outer openings of lobster traps and by providing a simplified method of measuring the trap openings. A savings of \$35⁴ will result. Administration of permits, data reporting, and other management activities specified in the existing regulations would be unaffected. The cost of preparing and processing this plan amendment is approximately \$2,500.00.

E. Summary of Costs and Benefits

The major categories of costs and benefits of the 4 management alternatives are compared on page 41 in matrix form:

Alternatives		Benefits and Costs		
	Spiny Lobster Stock Condition	Endangered Species	Economics	Administration/ Enforcement
1	0	0	-\$83,000 to \$167,000	-\$531 to \$1,969
2	0	-	Long-term + up to \$180,000/yr	-\$1,969
3	0	-	Long-term - up to \$180,000/yr	-\$6,249
4 (Preferred)	0	0	Short-term - \$2,000 Long-term + up to \$180,000/yr	-\$2,146

Code: 0 = no impact
 - = negative impact (added cost in \$)
 + = positive impact (added benefits in \$)

10.0 PREFERRED ALTERNATIVE

10.1 Selected Management Measure and Justifications

The proposed action would amend the regulations implementing the approved FMP to permit a wider range of lobster trap designs in the NWHI spiny lobster fishery, while minimizing the potential for entrapment of Hawaiian monk seals. Specifically, the language of Section 681.24, paragraph (b), will be amended to eliminate the measurement of the outer opening of lobster traps and to change the method of measuring the inner opening. The proposed change would require that the smallest opening of an entryway of any spiny lobster trap may not allow any sphere or cylinder greater than 6.5 inches in diameter to pass from outside the trap to inside the trap. Other provisions of the approved FMP and implementing regulations for the FCZ around the Northwestern Hawaiian Islands would remain unchanged.

The change in the trap entryway opening requirement will maintain a 6.5-inch measurement to prevent the possible entrapment of monk seals while allowing the use of a more oblong opening in traps. Most of the traps presently in use have entrance dimensions that do not conform to the existing regulations. This amendment is necessary to prevent economic disruption or possible curtailment of the NWHI lobster fishery that could result from enforcement of the existing trap opening restrictions. The proposed action will not diminish the protection given to the Hawaiian monk seal under the Spiny Lobster FMP but will avoid disruption of the existing fishery and will provide fishermen with the flexibility to use a variety of lobster trap designs.

The Preferred Alternative was selected based on comparing how well the alternatives would contribute to achievement of the four FMP objectives.

1. Protect Stock Productivity

None of the alternatives would have a significant effect toward this objective. The larger trap opening which would be permissible under Alternative 2 would not result in the capture of larger lobsters or otherwise affect stock conditions.

2. Maintain or Enhance Economic Contribution

Alternatives 2 and 4 would enhance the economic contribution of the the NWHI spiny lobster fishery to a greater extent than the other alternatives, because they would allow increased use of plastic traps which have proven more efficient than other existing gear. Under Alternative 3, there would be no disruption of the present fishery but future benefits would be jeopardized by enforcing the existing regulations for new gear brought into the fishery. Under these regulations, plastic traps would not be legal gear. Alternative 1 could result in economic disruption or possibly curtailment of the fishery and its economic benefits.

3. Collect Information

Alternatives 1 and 3 could promote better information for stock assessment than the others because they would reduce variation in gear type and thus would reduce the variability in catch/effort data reported by fishermen. Other alternatives would not have a significant effect toward this objective.

4. Prevent Unfavorable Impacts on Endangered or Threatened Species

Alternatives 1 and 4 achieve this objective because they restrict the smallest opening of any lobster trap to 6.5 inches, the maximum dimension discussed in the biological opinion to minimize the risk of monk seal entrapment. Alternative 1 also maintains size restrictions for the outer openings of traps, although the biological opinion did not indicate that such a measure would afford additional protection to monk seals. For new traps, Alternative 3 would achieve this objective to the same extent as Alternative 1 and 4, but Alternative 3 would allow the continued use, without modification, of approximately 800 existing wooden slat traps whose openings measure 7.5 inches. Although there is no evidence, detrimental impacts on the Hawaiian monk seal must be assumed for traps whose entrance openings exceed the accepted standard of 6.5 inches. Alternative 2 is the least likely to achieve this objective because it would allow trap entrance openings of any size.

In summary, the Preferred Alternative (Alternative 4) can satisfy both the second and fourth FMP objectives better than the others. Alternative 1 would also satisfy the fourth objective but would sacrifice the second objective. Alternative 2 would satisfy the second objective but would increase the risk of not achieving the fourth objective. Alternative 3 would not satisfy the fourth objective as well as Alternatives 1 and 4 and would work against achieving the second objective in the long term. Alternatives 1 and 3 would satisfy the third objective better than the other alternatives but would sacrifice the second objective.

The analysis in Section 9.0 indicates that the Preferred Alternative produces economic benefits as substantial as Alternative 2 while providing a

higher level of protection to endangered species. The other alternatives produce significantly lower economic benefits. The economic benefits of the Preferred Alternative clearly outweigh the small increase in administrative costs necessary to prepare and process this amendment.

The Preferred Alternative would allow the continued use of wooden slat traps, with an inexpensive modification. This modification has already been made by one of the two vessels carrying such traps and will protect the original investment in gear, while reducing the potential risk of monk seal entrapment to the accepted standard established in the biological opinion.

10.2 Determination of Environmental Impacts

The approved FMP continues basically unchanged. The proposed modification has no impact on fishery resources or the environment. This action would have a beneficial effect for fishermen by providing the flexibility to use a wide range of lobster trap designs, while still affording the Hawaiian monk seal the level of protection established by the biological opinion and the original FMP. The proposed action would not result in impacts significantly different in context or intensity from those described in the previous Environmental Impact Statement (EIS) published for the regulations implementing the approved FMP.

- Mitigating Measures Related to Proposed Action

None

- Unavoidable Adverse Effects

None

- Relationship Between Local Short-term Uses of the Resource and Enhancement of Long-term Productivity

Long-term human and resource productivity should be enhanced by providing the flexibility to use a wide range of lobster trap designs, while still protecting the Hawaiian monk seal to a degree that is commensurate with its status as an endangered species.

- Irreversible and Irretrievable Commitment of Resources

None

10.3 Determination of Impacts Under Executive Order 12291 and the Regulatory Flexibility Act

The action proposed by this amendment is essentially a clarification or correction of existing regulations. Section 7.4 described the NWHI spiny lobster fishery, indicating that the number of participating vessels has ranged from less than 3 to 10. Section 9.0 projected negative economic impacts of no greater than \$2,000, with the possibility of increasing the economic benefits from the fishery up to \$180,000 per year. For these reasons, the proposed action is not deemed to be "major" under the definition of Executive Order 12291 and will not have a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act.

10.4 Applicability of the Paperwork Reduction Act

The data collection and reporting burdens of the approved FMP would be unchanged by the proposed action, and there is no new collection of information requirement for purposes of the Paperwork Reduction Act.

10.5 Coastal Zone Consistency

For reasons set forth in Section 7.3.1, approval and implementation of Spiny Lobster Amendment #2 is consistent to the maximum extent practicable with the approved State of Hawaii Coastal Zone Management Program.

11. PROPOSED AMENDMENT OF REGULATIONS

PART 681 - WESTERN PACIFIC SPINY LOBSTER FISHERIES

1. The authority citation for Part 681 reads as follows:

AUTHORITY: 16 U.S.C. 1801 et seq.

2. In §681.24, paragraph (b) is revised to read as follows:

§681.24 Gear restrictions

(a) * * *

(b) The smallest opening of an entryway of any spiny lobster trap may not allow any sphere or cylinder greater than 6.5-inches in diameter to pass from outside the trap to inside the trap.

12.0 COMMENTS ON THE DRAFT FMP AMENDMENT ENVIRONMENTAL ASSESSMENT

This section summarizes oral and written testimony on the draft FMP Amendment/Environmental Assessment submitted for public review. The draft was reviewed at one public hearing, at which testimony was presented by the State of Hawaii, Department of Land and Natural Resources. In addition, 3 letters were received from government agencies and a fishing company. All of the comments but one supported approval and implementation of Amendment #2. Section 12.1 below summarizes the single critical comment received during the review period, together with the response prepared by Council staff which received the concurrence of the Council at its 41st meeting.

12.1 Summary of Critical Public Comments with Responses

1. Comment: Favors Alternative #3 rather than the Preferred Alternative recommended in the draft amendment. This alternative would give the fishermen currently operating with wooden slat traps the opportunity to amortize their investment and convert as needed. Inasmuch as no monk seal problems have been reported with this trap to date, it is highly improbable this short conversion period will cause a problem.

Commenter: Lobster and shrimp fishing company

Response: Although no problems of monk seal entrapment have been reported with any of the lobster traps currently in use, the biological opinion for the Spiny Lobster FMP established a standard of 6.5 inches for trap entrance dimensions considering the endangered status of the monk seal. Alternative 3 would allow the continued use, without modification, of a trap type whose entrance opening measures 7.5 inches. Although there is no evidence, it must be assumed on the

basis of the biological opinion that all traps with openings larger than 6.5 inches could have a detrimental impact on monk seals. The Preferred Alternative affords the same level of protection to the monk seal as the standard established in the biological opinion, while allowing the continued use of wooden slat traps after a simple and inexpensive modification. This modification has already been made by one of the two vessels carry such traps and the original investment in gear will not be lost.

Council Concurrence: July 27, 1983 (41st Meeting).

12.2 Individuals Testifying at Public Hearing,
Honolulu, Hawaii

Date: July 25, 1983

Attendance: 5

Individuals Testifying:

Sakuda, Henry, Director, Division of Aquatic Resources, Department
of Land and Natural Resources, State of Hawaii

12.3 Individuals and Organizations Submitting Written Comments

Coggeshall, Dale, Pacific Islands Administrator, U.S. Fish and Wildlife
Service, Honolulu, Hawaii

Dailey, Murray, Director of Research and Development, Hawaiian Fishing
Research Company

Shomura, Richard, Director, Honolulu Laboratory, National Marine Fisheries
Service Southwest Fisheries Center